HW#27: Midpoint Application and Unit 1 Review: Geometry

Due Date: Thursday, Oct 2nd, 2014

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

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| **Example 1:** A triangle is located in the (x,y) coordinate plane. The vertices of triangle ABC are A(4, 1), B(-7, 2) and C(0, 5). What are the coordinates for the midpoint of AB? | | | | |
| **Goal**  **(what’s the goal?)** | **Required**  **(list givens)** | **Analysis**  **(what do you need? How will you solve?)** | **Solve** | **Paraphrase (check – does your answer make sense?)** |
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| 1) A Opposite vertices of a rectangle in the standard (x, y) coordinate plane have coordinates (5, 37) and (17,7), respectively. What are the coordinates of the center of this rectangle? | | | | |
| **Goal**  **(what’s the goal?)** | **Required**  **(list givens)** | **Analysis**  **(what do you need? How will you solve?)** | **Solve** | **Paraphrase (check – does your answer make sense?)** |
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| 1. Use the diagram to decide whether the given statement is *true* or *false*.   1. Points E, G, and F are collinear. \_\_\_\_\_\_\_\_\_\_ 2. Points E, G, and F are coplanar. \_\_\_\_\_\_\_\_\_\_ 3. Points *H*, *I*, and *G* are collinear. \_\_\_\_\_\_\_\_\_\_ 4. Points *H*, *I*, and *J* are coplanar. \_\_\_\_\_\_\_\_\_\_ |  |
| Description: http://image.tutorvista.com/Qimages/QD/50234.gif  2. Name at least 3 sets of 3 points in the figure above that are coplanar.   1. **\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_** 2. **\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_** 3. **\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_** | 3. If *AC* = 35, what is the value of MC?  x + 5 2x  A M C |
| 4. Find *BC.* |

**Unit 1 Review “Sho Nuff”**

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| Use the number line below to answer questions 1 – 4. | |
| 1. What is the distance, in coordinate units, between points *A* and *B*? | 2. What is the distance, in coordinate units, between points *B* and *E*? |
| 3. How much longer is *AD* than *BE*? | 4. How much longer is *CD* than *DE*? |